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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,387	06/13/2001	Kevin Anthony Simms	98-PDC-168	6899

7590

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Martin J. Moran, Esquire  
Cutler-Hammer  
Technology & Quality Center  
170 Industry Drive, RIDC Park West  
Pittsburgh, PA 15275-1032

EXAMINER

RODRIGUEZ, ISABEL

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 08/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/881,387

Applicant(s)

SIMMS ET AL.

Examiner

Isabel Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-12 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawai et al. (US 5,606,483) in view of Thomas (US 6,052,268).

Regarding claim 1, Sawai et al. discloses a protection system (fig. 1) for a load center and an electrical panel board (A) having lead bus bars comprising a temperature reactive material (1) attached to the panel board bus bars (see col. 4 lines 19-21), a control module (2) that monitors the temperature of the temperature reactive material where, when the temperature of the bus bars exceeds a predetermined temperature the circuit shuts off. Sawai does not disclose a shunt trip connected to a circuit breaker. Thomas discloses a protection system having a temperature reactive material (10), a control module and a shunt trip (3) where, when the temperature of the bus bars exceeds a predetermined temperature the control module commands the shunt trip to cause the circuit breaker to shut off the circuit. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sawai et al. to include the shunt trip and use a separate switching mechanism to have a fast response time. See col. 1 lines 19-21.

Regarding claim 2, Sawai et al. in view of Thomas discloses a the protection system of claim 1 wherein the temperature reactive material is a resistance temperature detector adhesive strip contacting the bus bars and comprises a conductive material contacting a supporting

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adhesive substrate. See col. 2 lines 33-37. Fig. 2 discloses the conductive material (10) with the adhesive strip contacting the breaker.

***Allowable Subject Matter***

3. Claims 3-12 are allowed.

4. Claims 3-12 recite, inter alia, a thermal detection system comprising a plural pole circuit breaker, lead bus bars, and a resistance temperature detector adhesive tape connected to the bus bars and to an electronic circuit that detects the resistance change in the resistance detector adhesive tape, which in turn sends a signal to a shunt trip connected to the circuit breaker.

Sawai et al. discloses a protection system for a load center and an electrical panel board having lead bus bars comprising a temperature reactive material attached to the panel board bus bars, a control module that monitors the temperature of the temperature reactive material where, when the temperature of the bus bars exceeds a predetermined temperature the circuit shuts off but does not disclose a shunt trip connected to a circuit breaker.

Thomas discloses a protection system having a temperature reactive material with and adhesive, a control module and a shunt trip where, when the temperature of the bus bars exceeds a predetermined temperature the control module commands the shunt trip to cause the circuit breaker to shut off the circuit but does not disclose a resistance temperature detector adhesive tape.

Gaston (US 5,627,719) discloses a thermal detection system comprising a plural pole circuit breaker, lead bus bars, and temperature detector connected to an electronic circuit that detects the resistance change in the temperature detector, which in turn sends a signal to a shunt

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trip connected to the circuit breaker but does not disclose a resistance temperature detector adhesive tape.

The references of record do not teach or suggest a resistance temperature detector adhesive tape in the claimed configuration, nor would it be obvious to modify those references to include such limitation.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isabel Rodriguez whose telephone number is 703-305-4761. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 703-308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-308-7704 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

IR  
July 25, 2003



BRIAN SIRCUS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800